

4735

Diag. Cht. No. 6002-2

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
_____, Director	
<div>G. & G. SURVEY L. & A. MAY 31 1928 Acc. No.</div>	
State: Washington	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 4735
LOCALITY	
Grays Harbor - Offshore	
Grays Harbor to Destruction I.	
1927	
CHIEF OF PARTY	
T. J. Maher	

GOVERNMENT PRINTING OFFICE

4735

Mr.

DESCRIPTIVE REPORT
to accompany

TOPOGRAPHIC TRAVERSE SHEET
of
DESTRUCTION ISLAND

*Registered as Boat Sheet
for 4735*

Steamer GUIDE
1927

Thos. J. Maher
Chief of Party

No descriptive report was submitted with H. 4735

E. P. E. May 31, 28

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC TRAVERSE SHEET OF DESTRUCTION ISLAND

AUTHORITY: Director's orders dated March 5, 1927.

PURPOSE: To establish control for the location of the Destruction Island Hydrophone.

SURVEY METHOD: An ordinary plane table traverse was made in the execution of this survey. The position of the Destruction Island Light House was assumed and the table set up close to this position. Cuts were taken to all prominent objects and a traverse was run out to the tree on the east end of the island, the prominent objects between these two points being located by intersections and roding.

At each set up a cut was taken on this tree and the final measured distance checked very closely with the intersection of these cuts.

The table was then set up on the light house tower, oriented on the line Destruction Island Light House to the tree on east end and the position of objects determined from the traverse checked by intersections. A direction was also taken to South Rock. Due to inclement weather, it was impossible to obtain directions to any other triangulation point along the shore.

HYDROPHONE LOCATION: A number of sextant angles were taken at the time the hydrophone was set and these were used to plot it's position on the topography sheet. A vertical angle and a bearing to the light house were taken at the same time. The computed distance and azimuth to the light house checked the position as determined by sextant fixes.

GEOGRAPHIC POSITION OF HYDROPHONE: The azimuth from Destruction Island Light House to South Rock being known, the true meridian through the position of the light house was laid off. The meridian and parallel shown on the sheet were then located from the geographic position of the light house. The D. M. and D. P. of the hydrophone location were then scaled from the sheet.

Respectfully submitted,

Francis L. Gallen

Francis L. Gallen,
H & G E, C & G Survey.

Forwarded, approved:

Thos. J. Maher,
Chief of Party.

Copy for Record Section.files.

May 8, 1928.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide reducers are approved in
11 volumes of sounding records for

HYDROGRAPHIC SHEET 4735

Locality: **COAST OF WASHINGTON**

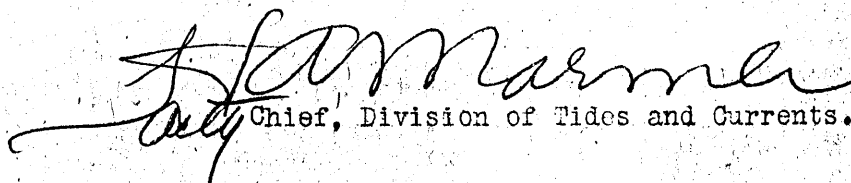
Chief of Party: **E. J. Maher, 1927.**

Plane of reference is **M L L W**

2.9 ft. on tide staff at **Pt. Grinnville.**

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.


Chief, Division of Tides and Currents.

May 24, 1928.

(11)

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in Vols. 12, 13 & 14.
3 volumes of sounding records for

HYDROGRAPHIC SHEET 4755

Locality: COAST OF WASHINGTON

Chief of Party: E. J. Maher, 1927.
Plane of reference is M L L W
2.9 ft. on tide staff at Pt. Grenville
2.4 ft. ——— do ——— Westport

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.



Chief, Division of Tides and Currents.

Section of Field Records.
Report on Hydrographic Sheet No. 4735.
Surveyed in 1929.

Chief of Party, Thos J. Maher.
Surveyed by, Ship's Officer
Positions Plotted by, E. H. Bernstein.
Soundings Plotted by, H. C. Warwick
Verified & Linked by, J. C. MacKib.

- 1.) The records conform to the requirements of the general instructions except that no descriptive report was submitted for this sheet.
- 2.) The plan and character of development fulfill the requirements of the General Instructions except that the easterly part of the work overlaps the adjacent sheets more than is ordinarily the practice.
- 3.) The plan and extent of the development satisfy the Specific Instructions.

2.
4.) The sounding line crossings are adequate although several crosslines or parts of lines on which the crossings were poor were rejected because of uncertain control or lack of control.

5.) The usual depth curves were drawn.

6.) The field plotting was completed to the extent prescribed by the General Instructions except in as much as a few inconsistent soundings and crossings, requiring a large amount of time in the office to solve, might have been investigated and solved more expediently by the field party.

7.) The office draftsman did not have to do over any part of the drafting done by the field party, however owing to the character of the work - the apparent uneven bottom - all of the R.A.R. positions were checked.

8.) (a) The junction with H. 4633a shows a number of soundings between Long $125^{\circ}45'$ and $125^{\circ}50'$ ~~which~~ and Lat. $47^{\circ}00'$ which differ by as much as 10 fathoms. It was noticed that the vertical cast soundings on H. 4633a agree much better than the echo soundings and it is therefore assumed that this difference is due to the method of obtaining the soundings. ~~As~~ In compiling the chart, the lowest soundings should be selected in accordance with the usual practice.

(b) The junction with H. 4633b is good, part of the overlap is shown on H. 4735 and part on H. 4633b.

(c) The junction with H. 4729 shows very good agreement throughout.

(d) It was decided that the few sounding lines running across H. 4729 to H. 4728 should be omitted on H. 4728 as the area is sufficiently covered on

H 4728 and better controlled.

(d) H 4775 joins this sheet H 4735 on the west and is simply a continuation of this sheet, no overlap was therefore necessary.

9.) No further surveying is required to fully develop the area within the limits of this sheet. (See para 10^(a) following.)

10. Remarks

(a) "22" fathoms "reported"

It is improbable that the "22" fathoms "reported" sounding shown in Lat. $47^{\circ}26'$, Long. $124^{\circ}54'30''$ on Chart 6002 exists in this locality. The soundings at the ~~south~~ northern edge of this sheet are irregular and may indicate some shoaling to the northward of the limits of this sheet.

It might be advisable to investigate this area to entirely disprove the 22 fathoms sounding.

See 27115.

(b) Slope corrections were disregarded because the slope was in most cases deduced from soundings on adjoining lines. There is enough uncertainty in the positions of these lines to lead to impossible results and improbable conditions.

When there are comparatively steep slopes over a small area, as along the edge of an extensive bank, it would appear advisable to develop this slope by vertical casts, at least to determine the degree of slope by this method.

11. Rating of the work.

(a) Character and scope of surveying - good.

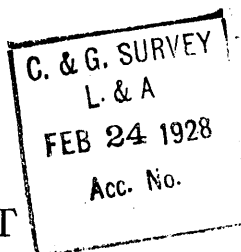
(b) Field drafting - good.

12. Reviewed by, John C. Mac Nab.

May 13th, 1929.

Approved A. M. Sobieralski
Chief section of Field
Records

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



HYDROGRAPHIC TITLE SHEET

REG. NO. 4735

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 7

REGISTER NO. 4735

State Washington

General locality Coast of Washington Grays Harbor

Locality Grays Harbor to Destruction Island. Offshore

Scale 1:80,000 Date of survey July 26, 1927
October 27, 1927

Vessel U.S.C. & G.S.S. GUIDE

Chief of Party Thos. J. Maher

Surveyed by Ships Officer

Positions Plotted
XTRACTED by E. H. Bernstein

Soundings penciled by H. C. Warwick

Soundings in fathoms XXXX

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated March 5, 1927. 192

Remarks: Work included in 14 volumes, 1 cahier of tube reducers, 1 cahier of tidal data. The depth curves have not been plotted on this sheet. Also included with this sheet are 4 Vols. Bomb Records 1 Vol. Hydrophone location angles, 1 sheet (topographic survey) Location of Destruction Island Hydrophone.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4735

The following statistics will be submitted with the
cartographer's report on the sheet:

RAR Control
Number of positions on sheet *2840*
Number of positions checked *all*
Number of positions revised *275*
Number of soundings recorded *6900*
Number of soundings revised *---*
Number of signals erroneously
plotted or transferred *None*

Date: *May 13th, 1929*

Cartographer: *John C. MacKale*